EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp		
L1	2	"20070129553"	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON .	2007/09/21 16:38		
L2	2	2,2-dimethyl-1, 3-dioxalane-4-methanol	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:39		
L3	4	l1 or l2	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:45		
L4	0	2,2-dimethyl-1, 3-dioxalane-4-carboxaldehyde	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:39		
L5	59	glyceraldehyde adj acetonide	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:44		
L6	3	I5 and tempo	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:44		
L7	0	I4 and tempo	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:45		
L8	3	13 and tempo	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:48		
L9	1085	(549/229, 546/216).ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:48		

EAST Search History

L10	7	19 and glyceraldehyde	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:50
L11	1	I10 and tempo	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:49
L12	23	tempo and glyceraldehyde	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:54
L13	533	TCCA.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:54
L14	92	dcdmh	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:54
L15	606	l13 or l14	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:55
L16	6	I15 and tempo	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	ON	2007/09/21 16:55

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         JUL 02
                 SCISEARCH enhanced with complete author names
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      3
                 CHEMCATS accession numbers revised
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         JUL 02
NEWS
     5
         JUL 02
                 CA/CAplus enhanced with utility model patents from China
                 CAplus enhanced with French and German abstracts
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     6
         JUL 16
                 CA/CAplus patent coverage enhanced
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         JUL 18
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     8
         JUL 26
                 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9
         JUL 30
                 USGENE now available on STN
                 CAS REGISTRY enhanced with new experimental property tags
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         AUG 06
                 BEILSTEIN updated with new compounds
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         AUG 06
                 CA/CAplus enhanced with additional kind codes for granted
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         AUG 13
                 patents
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 14
         AUG 20
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         AUG 27
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
         AUG 27
NEWS 16
                 USPATOLD now available on STN
NEWS 17
         AUG 28
                 CAS REGISTRY enhanced with additional experimental
                 spectral property data
         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
NEWS 18
                 World Patents Index
                 FORIS renamed to SOFIS
NEWS 19
         SEP 13
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 20
         SEP 13
                 CA/CAplus enhanced with printed CA page images from
         SEP 17
NEWS 21
                 1967-1998
                 CAplus coverage extended to include traditional medicine
         SEP 17
NEWS 22
                 patents
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NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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```
=> e 2,2-dimethyl-1,3-dioxolane-4-carboxaldehyde
E1
                  1ZZ1R/BI
            1
E2
       9298827
                   2/BI
E3
            0 --> 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBOXALDEHYDE/BI
E4
       2402530
                  20/BI
E5
            12
                  20-10-0/BI
E6
                  20-10-1/BI
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E7
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E12
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Substance data EXPAND from CAS REGISTRY in progress...

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E4
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E5
E6
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E12
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2,2~DIMETHYL-1,3-DIOXOLANE-4-ACETALDEHYDE/CN El 1 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBONYL CHLORIDE/CN E2 1 Ë3 --> 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBOXALDEHYDE/CN 1 E4 1 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBOXYLIC ACID/CN E5 1 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBOXYLIC ACID POTASSIUM SALT/ CNE6 1 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANAMINE/CN E7 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL/CN 1 E8 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL (6-ISOCYANATOHEXYL)CAR BAMATE/CN 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL MONOESTER WITH DHA 22/ E9 1 CN 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL MONOESTER WITH DHA 45/ E10 1 CN 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL N-(7-CHLORO-4-QUINOLYL E11 1) ANTHRANILATE/CN 2,2-DIMETHYL-1,3-DIOXOLANE-4-METHANOL-POLYETHYLENE-POLYPROPY E12 1 LENE GLYCOL GLYCEROL ETHER (3:1)-POLYMETHYLENEPOLYPHENYLENE ISOCYANATE COPOLYMER/CN

=> s e3

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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L2 116 L1
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=> s 12 and (preparation and tempo)

1546114 PREPARATION

80455 PREPARATIONS

1622435 PREPARATION

(PREPARATION OR PREPARATIONS)

2844349 PREPN

210593 PREPNS

3002977 PREPN

(PREPN OR PREPNS)

3849942 PREPARATION

(PREPARATION OR PREPN)

4228 TEMPO

52 TEMPOS

5 TEMPI

3 TEMPIS

4272 TEMPO

(TEMPO OR TEMPOS OR TEMPI OR TEMPIS)

L3 2 L2 AND (PREPARATION AND TEMPO)

=> d ibib abs hitstr 1-2

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:729816 CAPLUS

DOCUMENT NUMBER:

143:349015

TITLE:

Technical Production of Aldehydes by Continuous Bleach

Oxidation of Alcohols Catalyzed by 4-Hydroxy-

TEMPO

AUTHOR (S):

Fritz-Langhals, Elke

CORPORATE SOURCE:

Consortium fuer Elektrochemische Industrie GmbH,

Wacker-Chemie GmbH, Munich, D-81379, Germany

SOURCE:

Organic Process Research & Development (2005), 9(5),

577-582

CODEN: OPRDFK; ISSN: 1083-6160

PUBLISHER: DOCUMENT TYPE: American Chemical Society
Journal

LANGUAGE:

English

LANGUAGE:

TT

English

OTHER SOURCE(S):

CASREACT 143:349015

AB Aldehydes were easily prepared from the corresponding alcs. in good to excellent yields by oxidation with tech. bleach and catalytic amts. of 4-hydroxy-2,2,6,6-tetramethyl-piperidine-1-oxyl (4-hydroxy TEMPO

, HOT). Whereas the well-known batch process performed on laboratory scale is not suitable for the tech. synthesis especially of activated β -substituted aldehydes, this transformation can be performed continuously in a simple tube reactor. This layout meets all requirements necessary for the process, i.e., turbulent mixing of the biphasic mixture, removal of heat, short contact times, and high output. Thus, a single tube of 3 mm diameter

short contact times, and high output. The renders about 60 mol of aldehyde per day.

5736-03-8P, 2,3-0-Isopropylideneglyceraldehyde

RL: IMF (Industrial manufacture); PREP (Preparation) (high yield tech. production of aldehydes by continuous oxidation of alcs.

with bleach catalyzed by 4-hydroxy-TEMPO in tube reactor)

RN 5736-03-8 CAPLUS

CN 1,3-Dioxolane-4-carboxaldehyde, 2,2-dimethyl- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:395296 CAPLUS

DOCUMENT NUMBER:

142:430492

TITLE:

Process for the preparation of

glyceraldehyde acetonide from solketal via oxidation

reaction

INVENTOR(S):

Quaedflieg, Peter Jan Leonard Mario; Alsters, Paulus Lambertus; Pojarliev, Peter; Jary, Walther Gunther

PATENT ASSIGNEE(S):

DSM IP Assets B.V., Neth.

SOURCE:

PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
WO 2005040149			A1 · 20050506			WO 2004-EP12064					20041025						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,

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NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
               TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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               SN, TD, TG
     CA 2543303
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                                                                               20041025
                              A1
                                     20060712
                                                   EP 2004-817268
                                                                               20041025
     EP 1678158
                              A1
               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
      CN 1875014
                              Α
                                     20061206
                                                   CN 2004-80031932
                                                                               20041025
                                                   JP 2006-537158
      JP 2007522097
                              Т
                                     20070809
                                                                               20041025
                                                   IN 2006-DN2387
      IN 2006DN02387
                              Α
                                     20070803
                                                                               20060428
                                     20070607
                                                   US 2006-576447
      US 2007129553
                              A1
                                                                               20060714
PRIORITY APPLN. INFO.:
                                                   EP 2003-78392
                                                                               20031028
                                                   WO 2004-EP12064
                                                                               20041025
OTHER SOURCE (S):
                             CASREACT 142:430492; MARPAT 142:430492
GI
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AB The invention relates to a process for the prepn. of glyceraldehyde acetonide I, wherein R1-R4 are independently alkyl with 1 to 6 C-atoms and wherein R5 and R6 either both stand for H or an alkoxy group with 1 to 6 C-atoms or one stands for H and the other stands for an alkoxy group with 1 to 6 C-atoms, an alkylcarbonyloxy group with 1 to 6. C-atoms, an arylcarbonyloxy group with the carbonyloxy group having 1 to 6 C-atoms or an alkylcarbonylamino group with 1 to 6 C-atoms; or wherein R5 and R6 together stand for ketal groups, by oxidation of 2,2-dimethyl-1,3dioxolane-4-methanol by an oxidizing agent, wherein the 2,2-dimethyl-1,3-dioxolane-4-methanol is oxidized by an organic N-chloro compound in the presence of an inert base and TEMPO or a TEMPO-derivative In one embodiment of the invention enantiomerically enriched glyceraldehyde acetonide is prepared from the corresponding enantiomerically enriched 2,2-dimethyl-1,3-dioxolane-4-methanol. Preferably, the organic N-chloro compound is trichloroisocyanuric acid or dichlorodimethyl hydantoin. Preferably, the inert base is sodium acetate or sodium bicarbonate. Thus, oxidation of (R)-solketal with trichloroisocyanuric acid in presence of TEMPO in acetone gave (S)-glyceraldehyde acetonide in 80% yield.

IT 5736-03-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (process for the prepn. of glyceraldehyde acetonide from solketal via oxidation reaction)

RN 5736-03-8 CAPLUS

CN 1,3-Dioxolane-4-carboxaldehyde, 2,2-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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